

The Long Mile: Managing Chronic Pain

Session 4

GROUP HANDOUTS

Learning objectives

- Understand the benefits and limits of evidence-based medical treatments
- Understand the role of medical cannabis in chronic pain
- Learn how to choose and integrate evidence-based alternative therapies into a foundation of self-care
- Learn the benefits of some evidence-based integrative approaches and supplements for pain

Evidence-based medical treatments

General principles

- Pharmaceutical medications are not curative, they may improve symptoms but often come with side effects
- Start low, go slow, stay low - find the lowest dose to achieve maximum benefit
- Side effects often limit benefits eg. your choice of less pain versus more brain fog
- Avoid medications with side effects that require another medication to treat



Pharmacological treatments provide only modest benefit for FM

	Symptoms	% benefit	% significant S/E	Side effects
Amitriptyline	pain, sleep	25%	25%	Dry mouth, urinary retention, constipation
Duloxetine	sleep,pain, mood	41%	13%	Insomnia, heartburn/stomach upset, high BP
Pregabalin	pain, sleep	49%		Drowsiness, hangover, brain fog, weight gain
Gabapentin	pain, sleep	40%	16%	Drowsiness, hangover, brain fog, weight gain
Nabilone	pain	5%	4%	Drowsiness, dizziness, brain fog, dry mouth
Low dose naltrexone (not yet approved by Health Canada for FM)				

What about opioids?

What is the evidence?

Opioids for chronic noncancer pain:

a position paper of the American Academy of Neurology

Gary Franklin, MD, MPH, Sept. 2014

- Review of prescription opioid-related morbidity and mortality in US
- Highest risk age group (35-54 years) opioid deaths exceeded deaths from both firearms and motor vehicle accidents
- Evidence for only short-term relief of pain
- **No evidence for maintenance of pain relief or improved function over long periods of time without serious risk of overdose death, dependence or addiction**



Morbidity & Mortality of Pain “treatments”

Medication	Deaths/ Toxicity	Other	Notes
Acetaminophen	~ 36 / yr 287 deaths 2005-13	4500 admission in Canada / year	Health Canada
NSAIDs	16,500 / yr (in OA & RA pt only)	103,000 hospital admissions/yr in US	Singh 2000 (US stat)
Alcohol	29,001	TI = 10:1	US CDC 2013
Opioids (Rx)	>14,000	TI = 70:1	US CDC 2014
Cannabis	0 LD50 = inhale 1500 lbs in 15 min	TI = 1000:1	CDC & Health Canada

Therapeutic Index - Williamson EM, Evans FJ. Cannabinoids in clinical practice. *Drugs*. 2000 Dec;60(6):1303-14. Review. PubMed PMID: 11152013.

2014 National Pain Foundation Online Survey 1,300 FM Patients

FDA Approved meds for FM	Very Effective (%)	Helps A Little (%)	Does Not Help (%)
Duloxetine	8	32	60
Pregabalin	10	29	61
Milnacipran	10	22	68
Marijuana* (* NOT FDA Approved)	62	33	5

What about cannabis?



Is it a pharmaceutical or
alternative treatment?





Evidence for Medical Cannabis in Pain

Israeli study: Medical Cannabis for the Treatment of Fibromyalgia

- 26 patients with a diagnosis of FM were treated with medical cannabis
- Mean dosage: 26 ± 8.3 g per month
- Mean duration of use: 10.4 ± 11.3 months

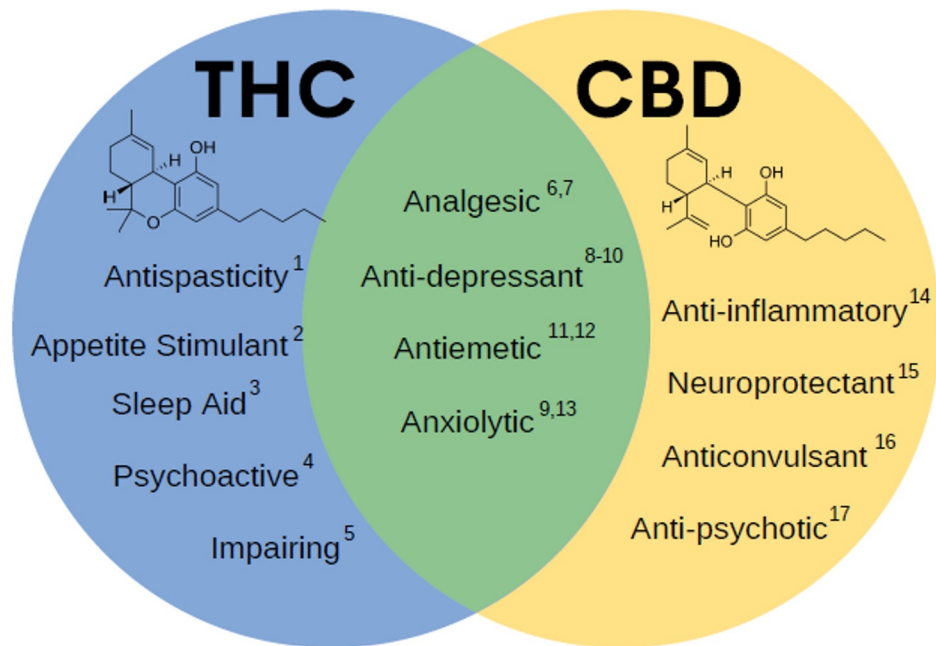
Results:

- All patients reported significant improvement
- 13 patients (50%) stopped taking any other medications for fibromyalgia
- Eight patients (30%) experienced very mild adverse effects.

Conclusions: Medical cannabis treatment had a significant favorable effect on patients with fibromyalgia, with few adverse effects.

Habib G, Artul S. Medical Cannabis for the Treatment of Fibromyalgia. J Clin Rheumatol. 2018 Aug;24(5):255-258.

THC & CBD - The Main Active Ingredients



The ratio of CBD to THC in the plant influences the therapeutic effects

Summary of Evidence for Cannabis

National Academies of Sciences 2017

Substantial Evidence

- Treatment of chronic pain and neuropathic pain in adults
- Chemotherapy-induced nausea and vomiting
- For improving patient-reported MS spasticity



Limited Evidence

- Anxiety disorders (PTSD, SAD, GAD)
- Drug-resistant seizures/epilepsy/anticonvulsant (pediatric)
- Improving short-term sleep outcomes individuals with OSA, fibromyalgia, chronic pain and multiple sclerosis
- Cancers, including glioma
- Cancer-associated anorexia and anorexia nervosa
- Symptoms of IBS
- Spasticity in patients with paralysis due to spinal cord injury
- Symptoms associated with ALS
- Motor disorders (Huntington's disease, Parkinson's disease, Tourette syndrome)
- Achieving abstinence in the use of addictive substances
- Mental health outcomes in individuals with schizophrenia

National Academies of Sciences. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*. 2017.


Methods of Administration

Oral

- Oral oil often preferred method of administration
- Long acting
- Easy to titrate
- Oral, suppository or topical
- Discreet, Convenient, No odor or taste
- Carrier oil



Referral form

		PATIENT REFERRAL FORM		#218-8525 201 Street Langley, BC V1M 4A5 t: (604) 371-4769 f: (604) 371-2044 www.greenleafmc.ca	
		<input type="checkbox"/> URGENT <input type="checkbox"/> SEMI-URGENT			
PHYSICIAN INFORMATION					
Referring Physician:		Phone:		Fax:	
Billing #:					
Family Physician:		Phone:		Fax:	
PATIENT INFORMATION					
Last Name:		First:	Middle:	Sex: <input type="checkbox"/> M <input type="checkbox"/> F	
Date of Birth: (dd/mm/yyyy)		Personal Health Number:			
Address:		City:	Province:	Postal Code:	
Home Phone:		Cell Phone:	Email:		
PATIENT MEDICAL HISTORY					
MENTAL HEALTH CONDITIONS					
<input type="checkbox"/> ADD/ADHD	<input type="checkbox"/> Bi-Polar	<input type="checkbox"/> PTSD			
<input type="checkbox"/> Anxiety	<input type="checkbox"/> Depression	<input type="checkbox"/> Sleep Disorder			
<input type="checkbox"/> Autism/Developmental Delay	<input type="checkbox"/> Eating Disorder	<input type="checkbox"/> Schizophrenia			
GASTROINTESTINAL CONDITIONS					
<input type="checkbox"/> Appetite	<input type="checkbox"/> Crohn's Disease	<input type="checkbox"/> Irritable Bowel Syndrome			
<input type="checkbox"/> Colitis	<input type="checkbox"/> Hepatitis	<input type="checkbox"/> Nausea			
NEUROLOGICAL/PAIN CONDITIONS					
<input type="checkbox"/> Alzheimer's Disease	<input type="checkbox"/> Complex Regional Pain Syndrome	<input type="checkbox"/> Parkinson's Disease			
<input type="checkbox"/> Arthritis-Osteoarthritis	<input type="checkbox"/> Degenerative Disc Disease	<input type="checkbox"/> Pelvic Pain/Endometriosis			
<input type="checkbox"/> Arthritis-Rheumatoid Arthritis	<input type="checkbox"/> Epilepsy/Seizures	<input type="checkbox"/> Post Surgical Pain			
<input type="checkbox"/> Back & Neck Pain	<input type="checkbox"/> Fibromyalgia	<input type="checkbox"/> PMS/Menstrual Cramps			
<input type="checkbox"/> Bladder Pain	<input type="checkbox"/> Glaucoma	<input type="checkbox"/> Repetitive Strain Injury			
<input type="checkbox"/> Brain/Head Injury/Concussion	<input type="checkbox"/> Jaw Pain	<input type="checkbox"/> Spinal Cord Injury/Disease			
<input type="checkbox"/> Central Sensitivity Syndrome	<input type="checkbox"/> Migraines	<input type="checkbox"/> Trauma			
<input type="checkbox"/> Chronic Pain/Neuropathic Pain	<input type="checkbox"/> Muscle Spasms				
CANCER CONDITIONS					
<input type="checkbox"/> Appetite	<input type="checkbox"/> Nausea				
<input type="checkbox"/> Cancer	<input type="checkbox"/> Pain				
MISC./OTHER CONDITIONS					
<input type="checkbox"/> Chronic Fatigue Syndrome	<input type="checkbox"/> HIV/AIDS	<input type="checkbox"/> Menopause			
<input type="checkbox"/> Fatigue	<input type="checkbox"/> Libido	<input type="checkbox"/> POTS			
<input type="checkbox"/> Other					
Please select medication that has been tried:					
<input type="checkbox"/> Gabapentin/Lyrica	<input type="checkbox"/> Muscle Relaxants	<input type="checkbox"/> Opioids	<input type="checkbox"/> NSAIDS	<input type="checkbox"/> SSRI	
<input type="checkbox"/> IV Lidocaine	<input type="checkbox"/> IV Ketamine	<input type="checkbox"/> Nabilone	<input type="checkbox"/> Tramadol	<input type="checkbox"/> Amitriptyline/Nortriptyline	
Does the patient have any UNCONTROLLED mania, schizophrenia, depression, using sedatives/hypnotics/other psychoactive drugs?					<input type="checkbox"/> Yes <input type="checkbox"/> No
DO SEND: List of medications. Any injury or disease relevant imaging such as XRay, CT, MRI etc. As well as relevant consults (psych, neuro, rheum and surgical.) DO NOT SEND: Bloodwork results.					
Other Medical History:					
Email referral to: fax@greenleafmedicalclinic.ca OR Fax referral to 1-604-371-2044					
Physician Signature: _____			Date: _____		

- Seek out professional guidance for medical cannabis (eg. greenleafmc.ca)
- Recreational products in retail outlets do not have the same quality control and precision dosages as products made for medical use.

If you are interested in medical cannabis

Start with learning about the fundamentals of treatment

Visit

greenleafmc.ca/physician-led-group-classes

to register!



Ask the Expert Cannabis Series

Dr. Caroline MacCallum & Fonda Betts

In this series you will learn about: the fundamentals of medical cannabis, vaporization, topical applications, oral cannabis oil, edibles and concentrates. We will also discuss; potential drug interactions, treatment plans and monitoring for optimal symptom control.

What is integrative,
complementary or
alternative medicine?

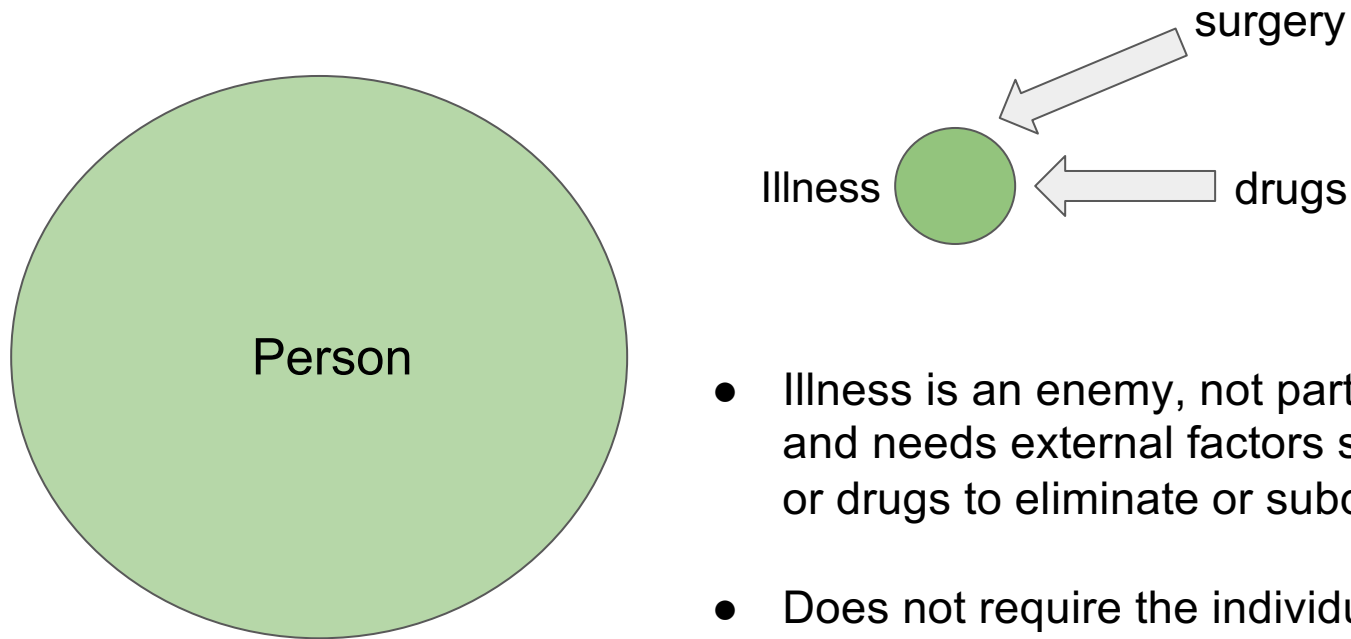
Let's start with Definitions

- Alternative medicine (1970's and 80's)
- Complementary medicine (1990's)
("parsley on the plate" Dr. Andrew Weil)
- Integrative medicine (2000 - present)
- Functional medicine (now board certified in US)



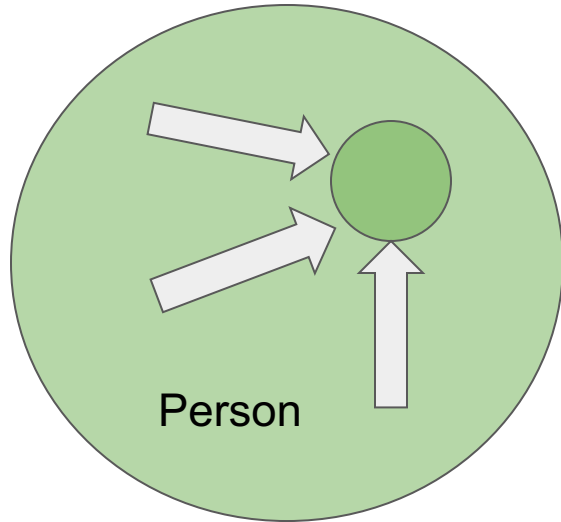
*“Not widely taught in North American medical schools
nor generally available in hospitals” Dr. David Eisenberg*

Disease based model



- Illness is an enemy, not part of the whole and needs external factors such as surgery or drugs to eliminate or subdue symptoms
- Does not require the individual to actively participate. The doctor has full responsibility

Whole person model



- Illness is part of the whole and responds to myriad factors in our internal ecology that promote healing
- Requires that the individual actively participates and partners with healthcare professionals
- **CAM** therapies generally involve a whole person approach to promote healing

Benefits of a whole person model

- Holistic approach
- Physical and emotional wellbeing
- Therapeutic relationship with practitioner
- Low risk of side effects
- Prevention of recurrence of disease
- Prevention of other chronic disease
- Reduction in side effects of conventional treatments
- Improvement in response to conventional treatments
- Quality of life



Some risks of CAM therapies

- May result in delay of diagnosis and loss of opportunity of curative medical treatment eg. cancer
- Some herbs/supplements may have side effects
- Some products may be contaminated with toxins
- Contra-indications with prescription medications
- Financial strain
- Risk of product scams

What are some CAM therapies?

Alternative medical systems

- Traditional Chinese Medicine
- Naturopathy
- Chiropractic
- Ayurvedic medicine
- Homeopathy

Alternative modalities

- Bodywork
- Reflexology
- Touch therapies (reiki, healing touch)



Credentialing and licensing

Examples in BC:

- College of Massage Therapists
- College of Naturopathic Medicine
- College of Chiropractic Medicine
- College of Traditional Chinese Medicine and Acupuncturists of BC

Regulatory colleges are responsible for credentialing and licensing healthcare professionals and reviewing public complaints. All have websites.

How to find a practitioner

- Talk to friends/neighbours or GP for referrals
- Search online for a practitioner near you
- Look up website of the practitioner's regulating college to check if they are licensed in BC and in good standing
- Go in for a trial treatment and watch for **red flags** of unprofessionalism
- Interview practitioner to assess treatment plan and personal compatibility. Trust is important part of therapeutic relationship.

Watch for red flags



- Dogmatic/authoritarian
- Bragging behaviours/miracle cure claims
- Using fear to manipulate/coerce into treatment or product use
- Promotes conspiracy theories verbally or online
- Has paranoia about medical practices other than their own
- Inappropriate touch
- Extending beyond scope of practice
- Unregulated practitioners may not have clear boundaries in their scope of practice

Keep in mind

- CAM therapies are usually not covered by provincial medical plans. Extended health plans have limited coverage. Over spending may cause financial stress that offsets the benefit of treatment
- Choose therapies with a reasonable expectation of long term results rather than only temporary improvement in symptoms
- Choose regulated/licensed practitioners where possible. Check licensing websites

CAM therapies may kick start or support the process of recovery but self-care is the key to maintaining progress achieved



Some examples of integrative approaches

NCCAM categories

1. Alternative medical systems
2. Bioelectromagnetic
3. Diet, nutrition, lifestyle, supplements
4. Herbal medicines
5. Manual and touch therapies
6. Mind/body therapies – eg.counselling, meditation, relaxation, yoga
7. Pharmacologic and biologic treatments – eg. chelation, anti-oxidants, immune boosters

Total of over 10,000 treatment methods

You can't do it all



Special diet programs, vitamins and supplements

Usually under supervision by registered dietitian or naturopathic physician

Some examples are:



- Elimination diet for food sensitivities, gluten free diet, FODMAP diet for IBS pain (<https://www.webmd.com/ibs/guide/what-is-fodmap>)
- Dietary supplements to treat deficiencies such as Vit.D, magnesium, omega 3's
- Natural pain treatments such as curcumin, PEA, CBD
- Seek advice from a licensed healthcare professional

Magnesium plays a role in pain management

Na HS, Ryu JH, Do SH. The role of magnesium in pain. In: Vink R, Nechifor M, editors. Magnesium in the Central Nervous System [Internet]. Adelaide (AU): University of Adelaide Press; 2011. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK507245/>

- Neuropathic pain- post-herpetic neuralgia, diabetic neuropathy, chemo-induced neuropathy
- Dysmenorrhea
- Tension headache and migraine
- Reduces surgical opioid requirements

Also found to be helpful for fibromyalgia pain

Bagis S., Karabiber M., As I., Tamer L., Erdogan C., Atalay A. Is magnesium citrate treatment effective on pain, clinical parameters and functional status in patients with fibromyalgia? *Rheumatol. Int.* 2012;33:167–172

Vitamin D plays a role in pain management

Makrani AH, Afshari M, Ghajar M, Forooghi Z, Moosazadeh M. Vitamin D and fibromyalgia: a meta-analysis. *Korean J Pain*. 2017;30(4):250-257.
doi:10.3344/kjp.2017.30.4.250

Meta-analysis of 12 studies:

- Vitamin D serum levels of patients with fibromyalgia was significantly lower than that of control group
- Vit.D supplementation should be considered as a preventative strategy



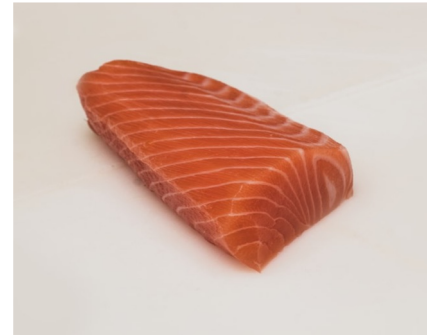
Omega 3's play a role in pain management

Goldberg RJ, Katz J. A meta-analysis of the analgesic effects of omega-3 polyunsaturated fatty acid supplementation for inflammatory joint pain. *Pain*. 2007 May;129(1-2):210-23. doi: 10.1016/j.pain.2007.01.020. Epub 2007 Mar 1. PMID: 17335973.

Meta-analysis of 17 studies on joint pain associated with rheumatoid arthritis, inflammatory bowel disease and dysmenorrhea

Supplementation for 3-4 months reduced:

- Joint pain intensity
- Minutes of morning stiffness
- Number of painful joints



Omega 3's for neck/back pain

Maroon JC, Bost JW. Omega-3 fatty acids (fish oil) as an anti-inflammatory: an alternative to nonsteroidal anti-inflammatory drugs for discogenic pain. Surg Neurol. 2006 Apr;65(4):326-31

250 patients seen by a neurosurgeon and found to have non-surgical neck or back pain took 1200 - 2400 mg per day of omega 3 fish oil supplements.

After an average of 75 days:

- 59% discontinued taking their NSAID medication
- 60% said their pain improved
- 88% stated they would continue to take fish oil
- There were no significant side effects

Choose fish oil supplements that have been certified by a third party to be toxin free

Conclusion: “Omega 3 fish oil supplements appear to be a safer alternative to NSAIDS for treatment of non-surgical neck or back pain.”

Curcumin (turmeric) and chronic pain

A. Sahebkar, Y. Henrotin, Analgesic Efficacy and Safety of Curcuminoids in Clinical Practice: A Systematic Review and Meta-Analysis of Randomized Controlled Trials, *Pain Medicine*, Volume 17, Issue 6, June 2016, Pages 1192–1202

Systematic review and meta-analysis of 8 RCT's that included 606 patients.

Dosage range was 400-6,000 mg

Curcuminoids were found to:

- Significantly reduce pain in different disease conditions
- Safe and well tolerated in all studies
- Side effects were mild and less frequent than the groups on NSAIDs
- One study reported that half the patients on NSAIDs were able to stop NSAIDs



Note: Low oral bioavailability is an issue. Piperine (from black pepper) enhances bioavailability

PEA (palmitoylethanolamide) and chronic pain

- A fatty acid first identified in 1950's as an anti-inflammatory agent in chicken egg yolks
- Effects endocannabinoid function and assists binding to receptors
- Currently available as a nutraceutical
- Helpful for FM and chronic neuropathic pain by reducing neuroinflammation
- Clinical trials reported reduced pain intensity and almost complete absence of unwanted side effects
- May also help with depression, osteoarthritis, chronic pelvic pain, shingles neuralgia
- Standard dose: 400 mg capsule 3x/day

Linda Gabrielsson, Sofia Mattsson, Christopher J. Fowler, Palmitoylethanolamide for the treatment of pain: pharmacokinetics, safety and efficacy. *Br J Clin Pharmacol.* 2016 Oct; 82(4): 932–942

Paladini A, Fusco M, Cenacci T, Schievano C, Piroli A, Varrassi G. Palmitoylethanolamide, a special food for medical purposes, in the treatment of chronic pain: a pooled data meta-analysis. *Pain Physician* 2016; **19**:11–24

Alternative medical systems

Some examples

- Acupuncture
- Ayurveda
- Homeopathy

Acupuncture and Traditional Chinese Medicine (TCM)



- Theories of acupuncture and TCM formally compiled in major textbooks around 500 BCE.
- Major concepts of TCM are Chi energy, the Yin Yang theory and the meridian theory
- Chi is the vital life force that flows along pathways in the body that have been mapped out as acupuncture meridians
- Pain is due to the stagnation or poor flow of chi
- Acupuncture helps to restore Yin Yang balance and improve the flow of chi
- TCM includes moxibustion, cupping, Chinese massage, tai chi and chi gong

Acupuncture for chronic pain

Is acupuncture effective for the treatment of chronic pain?

Bottom line: **Yes**

- 2018 meta-analysis of 39 randomized studies with 20,827 patients that evaluated the use of acupuncture to treat specific musculo-skeletal pain, osteoarthritis, chronic headache, or shoulder pain lasting at least 4 weeks. **For each chronic pain condition acupuncture was superior to no acupuncture.** Treatment effects persisted over time with only a small decrease.

Reference: Vickers et al. Acupuncture for chronic pain: Update of an individual patient data meta-analysis. J Pain 2018; 19(5):455-474

Ayurveda



- Traditional Indian system of medicine
- Oldest existing medical system dating back 5,000 years
- Diagnosis based on determination of constitutional types: vata, pitta, kapha
- Treatments are individualized and include diet, herbs, yoga, lifestyle routines, meditation, massage, detoxification and enhancement of life force
- Primary aims are to prevent illness, promote ideal health and extend lifespan

Patwardhan B. Bridging Ayurveda with evidence-based scientific approaches in medicine. *EPMA J.* 2014;5(1):19. Published 2014 Nov 1. doi:10.1186/1878-5085-5-19

Homeopathy

- Discovered by German physician Dr. Samuel Hahneman (1755-1843) in the 1790's. Author of "The Organon of the Healing Art"
- Based on principle of **like cures like** or Law of Similars: a substance that can cause certain symptoms when given in large doses to someone who is healthy can cure those symptoms when given in small doses to someone who is sick
- Remedies are very dilute and have a good safety record
- Chronic conditions require customization to the individual
- Acute pain can respond to the same homeopathic remedy for almost all individuals



Robertson A, Suryanarayanan R, Banerjee A. Homeopathic Arnica montana for post-tonsillectomy analgesia: A randomised placebo control trial. Homeopathy 2007;96:17–21

Bioelectromagnetic

- Transcutaneous Electrical Nerve Stimulation (TENS)
- Pulsed Electro-Magnetic Field (PEMF) devices
- Photobiomodulation (red light therapy)
- Infrared therapy
- Sound therapy
- Electric massage devices

- Check if device is Health Canada approved
- Look up studies
- Read reviews
- Beware of financial strain



Alternative modalities

Some examples

- Aromatherapy
- Healing Touch
- Mind-body therapies
- Music Therapy
- Reflexology

Aromatherapy

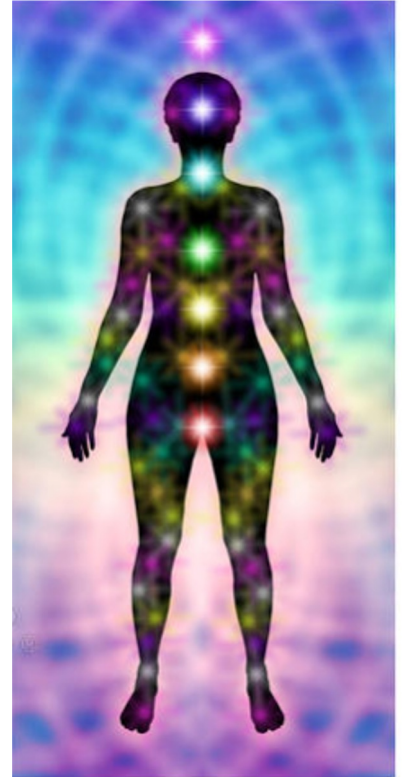


- Involves the use of essential oils from plants for a therapeutic effect
- Scent of oils stimulates the olfactory nerve which conducts sense of smell directly to the brain
- Often combined with reflexology (foot massage) or bodywork to enhance the therapeutic effect
- Reported benefits are exceptional relaxation and stress release
- Self treatment at home is possible with aromatherapy products used in a bath or diffuser. One example is lavender used to promote sleep.
- Aromatherapists are trained to select oils from an array of available oils and blend them for your symptoms
- Practitioners are not regulated or licensed in BC at present

Lakhan, S. E., Sheafer, H., & Tepper, D. (2016). The effectiveness of aromatherapy in reducing pain: a systematic review and meta-analysis. *Pain research and treatment*, 2016.

Healing touch

- Energy based therapeutic approach to healing
- Energy system is the electromagnetic field around us that consists of several fluctuating layers
- Touch is used to influence the energy system thus affecting physical, mental, emotional and spiritual healing
- Goal is to restore harmony and balance in the energy system to help the person to self heal
- Related therapies: Reiki, Therapeutic Touch, Energy Medicine



Tabatabaee, Amir et al. "Effect of Therapeutic Touch on pain related parameters in patients with cancer: a randomized clinical trial." *Materia socio-medica* vol. 28,3 (2016): 220-3.
doi:10.5455/msm.2016.28.220-223

Mind body therapies

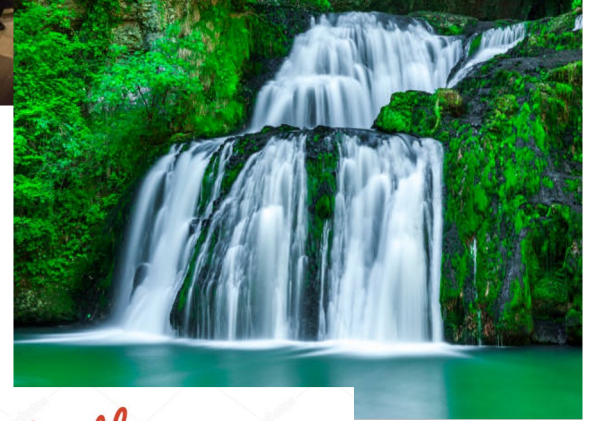
- Techniques include relaxation, meditation, guided imagery, visualization, tai chi, yoga
- May be practised in structured group settings or individually through CD's, DVD's, online recordings, apps etc.
- Many communities have classes that teach yoga, tai chi or meditation



Rosenzweig, Steven, et al. "Mindfulness-based stress reduction for chronic pain conditions: variation in treatment outcomes and role of home meditation practice." *Journal of psychosomatic research* 68.1 (2010): 29-36.

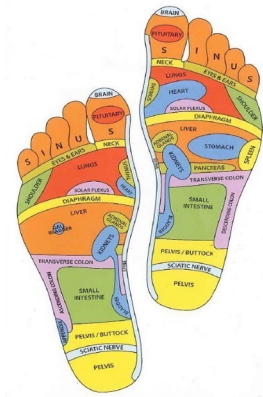
Music therapies

- Music can stimulate or relax brain activity
- Professional music therapists lead groups to promote relaxation and healing
- You can choose your own music. Find a relaxation CD with soft repetitive music that works for you
- Nature sounds have multiple frequencies which relax the brain
- Joyous choral music may lift the spirits
- Sing or play an instrument if you can



Reflexology

- Dates back to ancient Egypt
- Theory: the foot has points that relate to various body organs and functions. Points are mapped out
- Applying pressure/massage to these points result in a reflex effect on the corresponding organ or area of the body
- Aim of treatment is to promote healthy body function. Regular treatments for several weeks required to notice an improvement in health
- Recipients usually report immediate benefit in stress reduction
- May be learned by family for treatment at home



Babadi ME, Nazari F, Safari R, Abdoli S. The effect of reflexology on pain perception aspects in nurses with chronic low back pain in Isfahan. *Iran J Nurs Midwifery Res.* 2016;21(5):487-492.

Bottom line: Self care is your foundation



- Many therapies may be helpful
- You can't do them all
- Explore CAM therapies with common sense and professional guidance
- Be aware of side effects of both medical and CAM treatments
- **Check with a pharmacist if there are any contraindications with your prescription medications**

Time to kick back

Relaxation exercise

5. Magic carpet visualization

6. Autogenic training



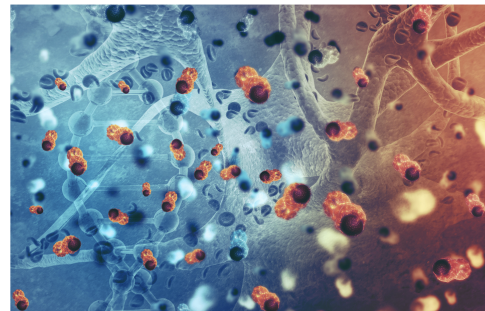
Wellness Group Medical Visits



The Long Mile: Managing Chronic Pain

Dr. Teresa Clarke

This 10-week series will help you on your chronic pain journey. You will learn how to promote healing through integrative approaches and optimize your physical and mental well-being.



Immune Health & How to Optimize Your Immunity

Dr. Teresa Clarke

In this session, you will learn integrative health approaches to promoting immune health. These approaches can be added to public health recommendations to reduce your risk of serious viral illness.



Acupressure for Chronic Illnesses

Dr. Teresa Clarke

In this series of three workshops, you will learn how Acupressure can be utilized in a self-treatment approach to improve wellbeing and symptom management in patients with chronic illnesses.



Osteopathy & Chronic Conditions

Fabio Bocchetti

In this series of four workshops, you will learn how Osteopathy can explain and treat several types of headaches, low back pain, knees or hip pain as well as digestive issues.

[REGISTER NOW](#)

Ask the Expert Cannabis Series

101: Cannabis Counselling & Treatment Plans

By participating you will learn about:

- The endocannabinoid system
- The differences between cannabinoids (THC & CBD)
- Routes of administration (oral oil & vaporization)
- Symptom management using cannabis
- Customized treatment plans
- How to dose your cannabis safely
- How to monitor for symptom improvements
- Potential side effects
- Drug interactions
- Supply options through a Health Canada licensed seller
- Cost of medication & discount programs available
- Extended health benefits & claiming as a medical expense
- Driving & travelling
- How to store your medication

201: Inhaled Cannabis; Dried Flower, Vape Pens & Extracts

By participating you will learn about:

- The difference between smoking & vaporization
- Is vaporization safe?
- When to consider using vaporized cannabis for symptom management
- Finding the right temperature for optimal benefit
- Types & cost of vaporizers
- Choosing the best strain to vaporize (sativa, indica, hybrids)
- How to determine your optimal dose & monitoring effects
- Taking proper care of your vaporizer
- Where am I allowed to vaporize my cannabis?
- Safe storage of vaporizer & cannabis
- Driving & travelling
- Inhaled extracts

301: Cannabis Edibles, Oral Preparations & Topicals

By participating you will learn about:

- The difference between medical & recreational cannabis
- Edibles (mints, baked goods, snacks, candy, chocolates, teas & other beverages)
- Tinctures & sprays
- Creams, salves & liniments
- Differences between onset of actions for various routes of administration
- Risks & side effects
- Choosing a product that is right for you
- Dosing of extracts and edibles; the basics
- Driving & travelling
- How to determine your optimal dose & monitoring effects

REGISTER NOW

Post Group Resources



Facebook Group

[JOIN HERE](#)



Resources

[LEARNING CENTRE](#)

[DR. MACCALLUM](#)



Follow Us



[@greenleafmed](#)



[@greenleafmedicalclinic](#)



Contact Us



[1-877-513-4769](tel:1-877-513-4769)



info@greenleafmc.ca



Customer Support

For immediate assistance use the live chat support on our website.

[VISIT WEBSITE](#)